Geographic Review Panel 3 – American River/Eastside Tribs

Proposal number: 2001-K207 **Short Proposal Title:** Lower Yuba River Monitoring and Research Program

1. Applicability to CALFED ERP Goals and Implementation Plan and CVPIA priorities, and relevance to ERP and CVPIA priorities for your region. This proposal addresses direct actions for both CALFED and the CVPIA. CALFED goals 1, 2 and 4 and AFRP Yuba River Actions 7 and 9. This project is important for restoration efforts on the Yuba River, efforts which should benefit spring-run chinook salmon and steelhead.

2. Linkages/coordination with previously funded projects or other restoration activities in your region. The proposed project is linked to DFG rotary screw trapping which is a CAMP-funded monitoring effort that is also supported by AFRP funds, and the Steelhead Life History Studies are funded by AFRP, CALFED and YCWA. The third action referenced in the proposal is a CALFED funded Implementation Plan being developed by SWRI under the direction of the YRTWG. The information that would be developed if this project is completed is intended to contribute to resolution of issues at Daguerre Point Dam.

3. Feasibility, especially the project's ability to move forward in a timely and successful manner. This Panel concurs with the TARP that said the proposal is technically feasible.

4. Qualifications of the applicants and others involved in implementing the proposed project. Applicant and selected team are qualified to conduct the work.

5. Local involvement (including environmental compliance). Support for this work by the Yuba River Technical Working Group is strong evidence of local support and involvement.

6. Cost. Cost seems reasonable.

7. Cost sharing. There are no cost share partners identified, but there is strong support for the study elements and funding is being pursued apart from this request.

8. Additional comments. Reviewers and panelists agree there is value in the proposal. There is some concern in the amount of detail available in regards to the research and monitoring involved and a suggestion is made to work with the applicant to refine the proposal to accurately and specifically articulate the necessary detail to successfully accomplish the goals of the proposal. This is especially important in the sediment portion of the proposal and how the information gathered will be used to address the fish passage issue at Daguerre.

The proposal states at p. 5 that "While other factors ... may also affect salmon and steelhead production, ... predation is believed to be a particularly influential biotic factor (Baltz and Moyle 1993; Lodge 1993)." Baltz and Moyle (1993) concerns the resistance of assemblages of fishes to invasion, not salmonid production, and is clearly off point.

Using fall-run as surrogates for spring-run for passage studies is a poor idea. Spring-run passing the dam are sexually immature and should be able to pass fairly easily over obstacles that would block fall-run.

The independent reviewers rated the proposal FAIR and GOOD and the TARP concluded GOOD.

Regional Ranking

Panel Ranking: Medium

Provide a brief explanation of your ranking: This proposal tries to address an important question in a highly important watershed and could be modified to get a high rating. We urge to the applicants to take seriously the comment of one reviewer about the proposal being a rough draft, and improve and resubmit it.

The main shortcomings of this proposal have been identified by the other reviewers, but perhaps could be stated more clearly. One major problem is the failure to tie potential findings to actions. That is, it would be ideal if the proposal could describe several possible treatments of the dam (e.g., remove, modify by X, modify by Y, leave alone) then specify which outcomes of the studies would lead to which treatment, along with a discussion of the "power" of the study methods and the likelihood that the outcomes will not be inconclusive.

The proposal, like most that we have reviewed, would also be strengthened if it took a Baysian rather than a frequentist approach (see Chapter 2 of Hilborn and Mangel (1997) The Ecological Detective which gives a good discussion of the difference). In simple terms, rather than asking whether or not salmon and steelhead are delayed by the dam, a Baysian approach would ask how much they are delayed, and answer the question in terms of a distribution of probabilities. Then, supposing it were specified in advance that a delay of more than a day is biologically significant, one could say that based on the data there is an x% chance that salmon and steelhead are delayed for a biologically significant length of time. Another strength of the Baysian approach is that the estimation of probabilities can take into account information gained from experience at other dams or from prior studies of the Yuba River.

As suggested above, the proposal would be considerably improved if it specified in advance what degree of concentration of predators or what incidence of juvenile salmonids in pike minnow stomachs would be biologically significant, etc.